



APPLICATION FOR PREAPPROVAL

SPECIAL SEISMIC CERTIFICATION OF EQUIPMENT AND COMPONENTS

For Office Use Only

APPLICATION NO.

OSP - 0045-10

Check whether application is: NEW ☒ RENEWAL ☐

1.0 JOHNSON CONTROLS, INC

FRANCIS E. JEHRIO

Manufacturer

Manufacturer's Technical Representative

631 S. RICHLAND AVE,
YORK, PA 17403

Mailing Address

717-771-6854

Telephone

Francis.e.jehrio@jci.com

E-mail Address

2.0 WATER COOLED CHILLERS

CHILLERS

Product Name

Product Type

Chillers, See attachments for approved components.

Product model No (List all unique product identification numbers and/or serial numbers)

General Description: RIGID BASE MOUNTED (may include thin neoprene pads) WATER COOLED CHILLERS WITH WELDED STEEL EVAPORATOR AND CONDENSER VESSEL CONSTRUCTION. THE CHILLERS INCLUDE COMPRESSOR, MOTOR, VSD, AND CONTROLLERS.

3.0 MAKEITRIGHT, INC.

JOSEPH L. LA BRIE, SE

Applicant Company Name

Contact Person

55 E. HUNTINGTON DR, SUITE 277,
ARCADIA, CA., 91006

Mailing Address

626-445-0366

Telephone

labrie@makeitright.net

E-mail Address

I hereby agree to reimburse the Office of Statewide Health Planning and Development for the actual costs incurred by the department for review.

Signature of Applicant

SEPTEMBER 27, 2010

Date

PRESIDENT / CEO

Title

MAKEITRIGHT, INC

Company Name

**Registered Design Professional Preparing the Report****MAKEITRIGHT, INC.**

4.0 _____

Company Name	
JOSEPH L. LA BRIE, SE	S 3566
Contact Name	California License Number
55 E. HUNTINGTON DRIVE, #277, ARCADIA, CA., 91006	
Mailing Address	
626-445-0366	labrie@makeitright.net
Telephone	E-mail Address

California Licensed Structural Engineer Review and Acceptance of the Report**MAKEITRIGHT, INC.**

5.0 _____

Company Name	
JOSEPH L. LABRIE, SE	S 3566
Contact Name	California License Number
55 E. HUNTINGTON DRIVE, #277, ARCADIA, CA., 91006	
Mailing Address	
626-445-0366	labrie@makeitright.net
Telephone	E-mail Address

Anchorage Pre-Approval

- 6.0
- ☐ Anchorage is pre-approved under OPA-
(Separate application for anchorage pre-approval is required)
- ☒ Anchorage is not Pre-approved

Certification Method

- 7.0 ☒ Testing in accordance with: ☒ ICC-ES AC-156 ☐ Other (Please Specify):
- ☐ Analysis
- ☐ Experience data
- ☐ Combination of Testing, Analysis, and/or Experience Data (Please Specify):

Testing Laboratory (if applicable)

8.0

UUT1: SEESL, University at Buffalo UUT2: UCSD: SRMD Test Facility	UUT1: Andre Filiatrault, Ph.D. UUT2: Gianmario Benzoni Ph.D.
Company Name	Contact Name
UUT1: 212 Ketter Hall, North Campus, Buffalo, NY 14260 UUT2: 9500 Gilman Drive, La Jolla, Ca., 92093	
Mailing Address	
UUT1: (716) 645-2114 X2434 UUT2: (858) 534-1432	UUT1: Filiatrault@mceermail.buttalo.edu UUT2: benzoni@ucsd.edu
Telephone	E-mail:

**Approval Parameters**

9.0

Design in accordance with ASCE 7-05 Chapter 13: ☒ Yes ☐ NoDesign Basis of Equipment or Components (F_p/W_p) = 2.61g S_{DS} (Spectral response acceleration at short period) = 1.45g a_p (In-structure equipment or component amplification factor) = 2.5 R_p (Equipment or component response modification factor) = 2.5 I_p (Importance factor) = 1.5 z/h (Height factor ratio) = 1.0

Equipment or Component fundamental period(s) = SEE ATTACHED

Building period limits (if any) = NONE

Overall dimensions and weight (or range thereof) = SEE ATTACHED

Equipment or Components @ grade designed in accordance with ASCE 7-05 Chapter 15: ☐ Yes ☒ NoDesign Basis of Equipment or Components (V/W) = S_{DS} (Spectral response acceleration at short period) = S_1 (Spectral response acceleration at 1 second period) = R (Response modification coefficient) = 1.0 Ω_0 (System overstrength factor) = 1.0 C_d (Deflection amplification factor) = 1.0 I_p (Importance factor) = 1.5

Height to Center of Gravity above base =

Equipment or Component fundamental period(s) = Sec

Overall dimensions and weight (or range thereof) =

Tank(s) designed in accordance with ASME BPVC, 2007: ☐ Yes ☒ No**10.0 List of attachments supporting the special seismic certification of equipment or components:**

☒ Test Report (2 LAB REPORTS) ☐ Drawings ☒ Manufacturer's Catalog
☐ Calculations ☐ Others (Please Specify):

11.0 OSHPD Approval (For Office Use Only)

Signature & Date

9/29/10

December 31, 2016

Chris Tokas, SHFR

Name & Title

Approval Expiration Date

 S_{DS} (g) = 1.45 z/h = 1.0

Special Seismic Certification Valid Up to

Condition of Approval (if any): **Approval is limited to components listed in the attachments and bracings equivalent to those in the tested specimens.**



Product Line and Model Numbers:

MODEL	TONAGE	UUT NUMBER	WEIGHT (lbs)	WIDTH (ft-in)	HEIGHT (ft-in)	LENGTH (ft-in)	FUND. FREQ. (hz)		
							ft to bck	side to side	vertical
YK FM FM P8	800 Ton	UUT-1	26,450	6'-11"	9'-4"	16'-0"	10.2	16.9	18.1
YK DS DS Q3	200 Ton	UUT-2	21,035	5'-6"	5'-10 1/2"	16'-0"	8	8.5	18.5



COMPONENT

MANUFACTURER: JOHNSON CONTROLS, INC

PRODUCT LINE	MODEL NUMBER	LARGEST	SMALLEST	INCLUDED WITH TEST	MOUNT CONFIGURATION
COMPRESSORS	Q3		X	UUT-2	Mounted on Unit
	Q4			*	Mounted on Unit
	Q5			*	Mounted on Unit
	Q6			*	Mounted on Unit
	Q7			*	Mounted on Unit
	P7			*	Mounted on Unit
	P8	X		UUT-1	Mounted on Unit

* Interpolated

COMPONENT

MANUFACTURER: JOHNSON CONTROLS, INC

PRODUCT LINE	MODEL NUMBER	LARGEST	SMALLEST	INCLUDED WITH TEST	MOUNT CONFIGURATION
EVAPORATOR	A			*	Base Mounted
	B			*	Base Mounted
	C			*	Base Mounted
	D		X	UUT-2	Base Mounted
	E			*	Base Mounted
	F	X		UUT-1	Base Mounted

* Interpolated

COMPONENT

MANUFACTURER: JOHNSON CONTROLS, INC

PRODUCT LINE	MODEL NUMBER	LARGEST	SMALLEST	INCLUDED WITH TEST	MOUNT CONFIGURATION
CONDENSER	A			*	Base Mounted
	B			*	Base Mounted
	C			*	Base Mounted
	D		X	UUT-2	Base Mounted
	E			*	Base Mounted
	F	X		UUT-1	Base Mounted

* Interpolated



COMPONENT

MANUFACTURER: JOHNSON CONTROLS, INC

PRODUCT LINE	MODEL NUMBER	LARGEST	SMALLEST	INCLUDED WITH TEST	MOUNT CONFIGURATION
OIL SUMP	14"Diamet		X	UUT-2	Mounted on Unit
	14"Diamet	X		UUT-1	Mounted on Unit

COMPONENT

MANUFACTURER: SCHNEIDER ELECTRIC

PRODUCT LINE	MODEL NUMBER	LARGEST	SMALLEST	INCLUDED WITH TEST	MOUNT CONFIGURATION
CONTROLLER	OPTVIEW		X	UUT-2	Mounted on Unit
	OPTVIEW	X		UUT-1	Mounted on Unit

COMPONENT

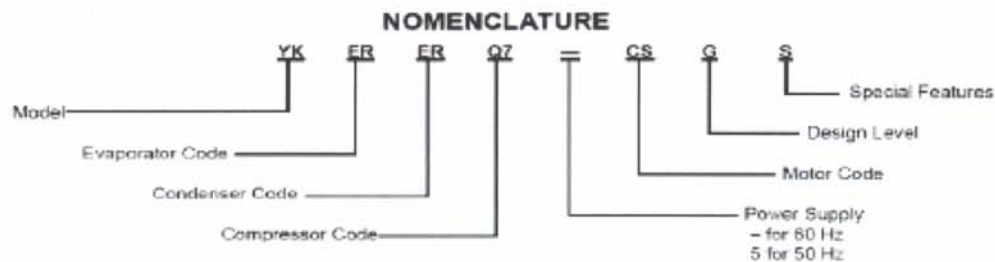
MANUFACTURER: SCHNEIDER ELECTRIC

PRODUCT LINE	MODEL NUMBER	LARGEST	SMALLEST	INCLUDED WITH TEST	MOUNT CONFIGURATION
VSD			X	UUT-2	Mounted on Unit

COMPONENT

MANUFACTURER: SCHNEIDER ELECTRIC

PRODUCT LINE	MODEL NUMBER	LARGEST	SMALLEST	INCLUDED WITH TEST	MOUNT CONFIGURATION
MOTOR			X	UUT-2	Mounted on Unit
		X		UUT-1	Mounted on Unit



PRODUCT CODE:

Johnson Controls, Inc., York Brand chiller products are identified by a Product Code as shown below.

The Model Type is a "YK".

The 2-character Evaporator Code is next and its range is from AP to Z4.

The 2-character Condenser Code is next and its range is from AP to Z4.

The 2-character Compressor Code is next and ranges from Q3 to K7.

The first letter of the evaporator and condenser code stand for the shell dia ranging from 25-1/4" for the evaporator and 21-1/4" for the condenser to 62" for the evaporator and 56-5/8" for the condenser for an "A".

The second letter represents the tube pattern. Bundle sizes vary for the same shell dia. Thus, for the same shell dia., the tonnage varies with the number of tubes.

The single-stage centrifugal compressor increase in capacity from the "Q's to the K's and include the P's and H's.